

LIST OF PRIOR ART CITED BY APPLICANT (PTO-1449)			ATTY. DOCKET NO. FSU-0004	APPLN. SERIAL NO. 09/909,992	
			APPLICANT(S) Susan Davis ALLEN		FILING DATE July 23, 2001
SEARCHED & PATENT DOCUMENTS					
EXAMINER'S INITIALS	*PATENT NO.	*ISSUE DATE	*INVENTOR NAME	CLASS	SUBCLASS
COPY	4,987,286	1/22/91	ALLEN	219	121.68
FOREIGN PATENT DOCUMENTS					
EXAMINER'S INITIALS	PATENT NO.	DATE	COUNTRY	CLASS	SUBCLASS
OTHER ART (Including Author, Title, Date, Pertinent Pages, Publisher, Place of Publication, Etc.)					
<i>SW</i>	A	S.D. Allen, J.O. Porteus and W.N. Faith, Infrared laser-induced desorption of H ₂ O and hydrocarbons from optical surfaces, Appl. Phys. Lett. Vol. 41(5), pp. 416-418 (1982)			
<i>WV</i>	B	S.D. Allen, J.O. Porteus, W.N. Faith, and J.B. Franck, Contaminant and defect analysis of optical surfaces by infrared laser induced desorption, Appl. Phys. Lett. Vol. 45(9), pp. 997-999 (1984)			
<i>XW</i>	C	J.O. Porteus, J.B. Franck, S.C. Seitel and S.D. Allen, Defect characteristics of optical surfaces using pulsed laser damage methods, Optical Engineering Vol. 25, No. 10, pp. 1171-1176 (1986)			
<i>AN</i>	D	W. Zapka, W. Ziemlich and A.C. Tam, Efficient pulsed laser removal of 0.2μm sized particles from a solid surface, Appl. Phys. Lett. Vol. 58 (20), pp. 2217-2219 (1991)			
<i>EW</i>	E	M. Genut, B. Livshits, Y. Uziel, O. Tehar-Zahav, E. Iskevitch, I. Barzilay, Laser removal of foreign materials from semiconductor wafers, Proc. SPIE Vol. 3274, pp. 90-99 (1998)			
<i>GW</i>	F	D. Yogeve, M. Engel, S. Zeid, I. Barzilay, and B. Livshits, Laser chemical process for clean applications in semiconductor manufacturing, Proc. SPIE 3933, pp. 77-87 (2000)			
<i>EW</i>	G	J.D. Kelley, M.I. Stuff, F.E. Hovis and G.J. Linford, Removal of small particles from surfaces by pulsed laser irradiation: observations and a mechanism, Proc. SPIE 1415, pp. 211-219 (1991)			
<i>RW</i>	H	Y.F. Lu, W.D. Song, C.K. Tee, D. S-H. Chan, and T.S. Low, Wavelength effects in the laser cleaning process, Jpn. J. Appl. Phys. Vol. 37, pp. 840-844 (1998)			
<i>CD</i>	I	V. Dobler, R. Oltra, J.P. Boquillon, M. Mosbacher, J. Boneberg and P. Leiderer, Surface acceleration during dry laser cleaning of silicon, Appl. Phys. A 69, pp. S335-S339 (1999)			
<i>Ca</i>	J	M. She, Dongsik Kim and C.P. Grigoropoulos, Liquid-assisted pulsed laser cleaning using near-infrared and ultraviolet radiation, J. Appl. Phys. Vol. 86, No. 11, pp. 6519-6524 (1999)			
<i>Ce</i>	K	A. Miller, S.J. Lee, S.D. Allen, Laser assisted particle removal "dry" cleaning of critical surfaces, Mater. Sci. Eng. B49, pp. 85-88 (1997) <i>Author switched</i>			
<i>RW</i>	L	C.T. Avedisian, The Homogeneous Nucleation of Limits of Liquids, J. Phys. Chem. Ref. Data Vol. 14, No. 3, pp. 695-729 (1985)			
<i>CD</i>	M	O. Yavas, P. Leiderer, H.K. Park, C.P. Grigoropoulos, C.C. Poon, W.P. Leung, N. Do and A.C. Tam, Optical Reflectance and Scattering Studies of Nucleation and Growth of Bubbles at a Liquid-Solid Interface Induced by Pulsed Laser Heating, Phys. Rev. Lett., Vol. 70, No. 12, pp. 1830-1833 (1993) <i>x</i>			
<i>Qd</i>	N	A.C. Tam, H.K. Park and C.P. Grigoropoulos, Laser Cleaning of Surface Contaminants, Appl. Surf. Sci. 127-129, pp. 721-725 (1998)			
<i>COPY</i>	O	J.B. Heroux, S. Boughaba, I. Ressejac, E. Saehler and M. Meunier, CO₂ laser-assisted removal of submicron particles from solid surfaces, J. Appl. Phys. 79(6), pp. 2857-2862 (1996)			
<i>RW</i>	P	M. Mosbacher, H-J. Munzer, J. Zimmermann, J. Solis, J. Boneberg & P. Leiderer, Optical field enhancement effects in laser-assisted particle removal, Appl. Phys. A 72, pp. 41-44 (2001)			
EXAMINER <i>SW</i>	DATE CONSIDERED <i>5/21/03</i>				

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						Yes No

OTHER ART (Including Author, Title, Date, Pertinent Pages, Publisher, Place of Publication, Etc.)

<i>Copy</i>	Q	D.R. Halfpenny and D.M. Kaner, A quantitative analysis of single pulse ultraviolet dry laser cleaning, J. Appl. Phys. Vol. 86, No. 12, pp. 6641-6646 (1999)
<i>Copy</i>	R	J.B. Heroux, S. Boughaba, I. Ressejac, E. Sacher and M. Meunier, J. Appl. Phys. 79, p. 2857 (1996)
<i>Copy</i>	S	X. Wu, E. Sacher and M. Meunier, The modeling of excimer laser particle removal from hydrophilic silicon surfaces, J. Appl. Phys. Vol. 87, No. 8, pp. 3618-3627 (2000)
<i>Missin</i>	G	G. Vereecke, E. Rohr and M.M. Heyns, Laser-assisted removal of particles on silicon wafers, J. Appl. Phys. Vol. 85, No. 7, pp. 3837-3843 (1999)
<i>Copy</i>	U	Y.F. Lu, Y.W. Zheng, W.D. Song, An energy approach to the modelling of particle removal by pulsed laser irradiation, Appl. Phys. A 68, pp. 569-572 (1999)
<i>Copy</i>	V	K. Mann, B. Wolff-Rottke and F. Muller, Cleaning of optical surfaces by excimer laser radiation, Appl. Surf. Sci. 96-98, pp. 463-468 (1996)
<i>-</i>	W	J. Adler, R.K. Sin, Y. Rabinovich and B. Moudgil, J. Coll. In (2000)
<i>-</i>	X	C. Canuto, M.Y. Hussaini, M.Y. Quarteroni, Spectral methods in fluid dynamics, Springer Series in Computational Physics, Springer-Verlag, New York (1988)
<i>Missin</i>	Y	Q. Chen, H.W. Lee, S. Allen, Bubble formation and growth in liquid encapsulated laser vapor deposition, Proceedings of the 2nd annual Louisiana Aerospace Forum, 113 (1994)
<i>Copy</i>	Z	A.C. Engelsberg, Transition from laboratory to manufacturing for a dry, laser-assisted cleaning technology, SPIE Vol. 3274, pp. 100-109 (1998)
<i>Copy</i>	AA	R.G. Horn, and D.T. Smith, Contact Electrification and Adhesion Between Dissimilar Materials, Science Vol. 256, pp. 362-364 (1992)
<i>Copy</i>	BB	M.Y. Hussaini, P. Rasetarinera, An efficient implicit discontinuous spectral Galerkin method, Journal of Computational Physics Vol. 172, pp. 718-738 (2001) <i>1st Author switched</i>
<i>Copy</i>	CC	K. Imen, S.D. Allen, S. Lee, Laser assisted microscale particle removal, Appl. Phys. Lett. 58(2), pp. 203-205 (1991) <i>✓</i>
<i>Missin</i>	DD	J.N. Israelachvili, Intermolecular and Surfaces Forces, Academic Press, London 1992
<i>Copy</i>	EE	S.J. Lee, K. Imen, S.D. Allen, CO ₂ Laser assisted particle removal threshold measurements, Appl. Phys. Lett. 61(19), pp. 2314-2316 (1992)
<i>Copy</i>	FF	S.J. Lee, K. Imen, S.D. Allen, Shock wave analysis of laser particle removal, J. Appl. Phys. 74(12), pp. 7044-7047 (1993)
<i>Missin</i>	GG	S.J. Lee, S.D. Allen, S. Miller, Materials Science and Engineering B 49, p. 85 (1997)
<i>Copy</i>	HH	P.T. Leung, N. Do, Leander Klees, W.P. Leung, Frank Tong, L. Lam, W. Zapka and A.C. Tam, Transmission studies of explosive vaporization of a transparent liquid film on an opaque solid surface induced by excimer-laser-pulsed irradiation, J. Appl. Phys. 72 (6), pp. 2256-2263 (1992)
<i>Copy</i>	II	Y.K. Lu, W.D. Song, K.D. Ye, Y.P. Lee, D.S.H. Chan and T.S. Low, A cleaning model for removal of particles due to laser-induced thermal expansion of substrate surface, Jpn. J. Appl. Phys. Vol. 36, pp. L1304-L1306 (1997)
<i>Copy</i>	JJ	Y.K. Lu, W.D. Song, Y. Zhang, M.H. Hong, T.S. Low, A theoretical model for laser removal of particles from solid surfaces, Applied Physics A 65, pp. 9-13 (1997)

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KK	Y.K. Lu, Y.W. Zheng, and W.D. Song, Laser induced removal of spherical particles from silicon wafers, J.Appl. Phys. Vol 87, No. 3, pp. 1534-1539 (2000)
LL	M. Meunier, J.B. Heroux, S. Boughaba, E. Sacher, CO ₂ laser assisted removal of sub micron particles from solid surface, J. Appl. Phys. 79 (6), pp. 2857-2862 (1996)
MM	M. Mosbacher, N. Chaoui, J. Siegel, V. Dobler, J. Solis, J. Boneberg, C.N. Afonso, P. Liederer, A comparison of ns and ps steam laser cleaning of Si surfaces, Appl. Phys. A 69, pp. S331-S334 (1999)
NN	M. Mosbacher, V. Dobler, J. Boneberg, P. Liederer, Universal threshold for the steam laser cleaning of submicron spherical particles from silicon, Appl. Phys. A70, pp. 669-672 (2000)
MISS	K.L. Mittal, Particles on surfaces Vol. 1-6, Plenum Press New York (1988-1998)
PP	H.K. Park, C.P. Grigoropoulos, W.P. Leung, A.C. Tam, A practical excimer laser-based cleaning tool for removal of surface contaminants, IEEE Transactions on Components, Packaging and Manufacturing Technology - Part A, Vol. 17, No. 4, pp. 631-643 (1994)
QQ	N.W. Pu, J. Bokor, S. Jeong, R. Zhao, Nondestructive ps-ultrasonic characterization of Mo/Si extreme UV multiplayer reflection coatings, J. Vac. Sci. Technol. B17 (6), pp. 3014-3523 (1999)
RR	A.C. Tam, W.P. Leung, W. Zapka, W. Ziemlich, Laser-cleaning techniques for removal of surface particles, J. Appl. Phys. 71 (7), pp. 3515-3523 (1992)
SS	O. Yavas, A. Schilling, J. Bischof, J. Boneberg, P. Leiderer, Bubble nucleation and pressure generation during laser cleaning of surfaces, Appl. Phys. A, 64, pp. 331-339 (1997)
TT	S. Miller, Dusty Lab May Revolutionize LEDs, Photonics Technology World, p. 34, September 2000

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